

Amendments to the Claims:

1. (currently amended) A nucleic acid molecule comprising a nucleotide sequence which encodes an engineered VSP α or VSP β protein comprising an amino acid sequence which differs from the amino acid sequence of a native protein ~~by at least one essential amino acid residue~~, wherein said engineered protein has an altered amino acid composition in comparison to said native protein, wherein said altered amino acid composition comprises an increase in essential amino acid content to at least ~~about~~ 5% and wherein said engineered protein ~~retains the conformation of the native protein and therefore~~ binds to at least one antibody, monoclonal antibody, antibody fragment, ~~protein, or modified~~ protein which ~~is capable of binding~~ binds to said native protein, wherein said native protein is VSP α or VSP β .

2. (currently amended) The nucleic acid molecule of claim 1, wherein said altered amino acid composition comprises an increase in essential amino acid content to at least ~~about~~ 10%.

3. (previously presented) The nucleic acid molecule of claim 1 wherein said altered amino acid composition comprises an increase in the content of an essential amino acid is selected from the group consisting of methionine, tryptophan, lysine, and cysteine.

4. (canceled)

5. (previously presented) A transformed plant containing within its genome the nucleotide sequence of Claim 1.

6. (original) A transformed plant containing within its genome the nucleotide sequence of Claim 3.

7. (previously presented) The plant of claim 5, wherein said plant is a monocot.

8. (currently amended) A stably transformed plant having inserted into its genome a nucleotide sequence which encodes an engineered VSP α or VSP β protein comprising an amino acid sequence which differs from the amino acid sequence of a native protein ~~by at least one essential amino acid residue~~, wherein said engineered protein has an altered amino acid composition in comparison to said native protein, wherein said altered amino acid composition comprises an increase in essential amino acid content to at least ~~about~~ 5% and wherein said engineered protein ~~retains the conformation of the native protein and therefore~~ binds to at least one antibody, monoclonal antibody, antibody fragment, ~~protein, or modified protein which is capable of binding~~ binds to said native protein, wherein said native protein is VSP α or VSP β .

9. (currently amended) The plant of Claim 8, wherein said altered amino acid composition comprises an increase in essential amino acid content to at least ~~about~~ 10%.

10. (previously presented) The plant of Claim 8, wherein said altered amino acid composition comprises an increase in the content of an essential amino acid selected from the group consisting of methionine, tryptophan, lysine, and cysteine.

11. (currently amended) The plant of Claim 8, wherein said altered amino acid composition comprises an increase in methionine content to at least ~~about~~ 10%.

12. (currently amended) The plant of Claim 8, wherein said altered amino acid composition comprises an increase in methionine content to at least ~~about~~ 20%.

13. (canceled)

14. (original) The plant of Claim 8, wherein said plant is a dicot.

15. (original) The plant of Claim 8, wherein said plant is a monocot.
16. (original) The plant of Claim 15, wherein said monocot is maize.
17. (previously presented) The plant of Claim 14, wherein said dicot is soybean.
18. (previously presented) A transformed seed of the plant of Claim 8.
19. (previously presented) A transformed seed of the plant of Claim 15.
20. (previously presented) A transformed seed of the plant of Claim 16.

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Amendments to the Drawings:

Please replace the drawings originally filed in the case with the formal drawings appended hereto.